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(54) Title: RATIO-BASED OLIGONUCLEOTIDE PROBE SELECTION

(57) Abstract: Disclosed herein are methods of selecting probes to target nucleic acid sequences, methods of making oligonucleotide arrays comprising such probes, and methods of using such arrays. Also, described herein are oligonucleotide arrays comprising probes selected by a method of the invention.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTERIPC(7) : C12Q 1/68; C07H 21/00
US CL : 435/6; 536/23.1, 24.3, 25.3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6; 536/23.1, 24.3, 25.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST, CAPLUS, MEDLINE, SCIRUS, BIOSIS

Probe selection, hybridization ratio, hybridization signal ratio.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 6,344,316 B1 (LOCKHART et al.) 5 February 2002 (05.02.02), see entire document.	1-67
X	US 6,040,138 (LOCKHART et al.) 21 March 2000 (21.03.00), see entire document.	1-3, 10, 11, 16-18, 20, 21, 23-31, 34, 40-67
Y		4-9, 12-15, 19, 22
X, P	RAMAKRISHNAN et al. An Assessment of Motorola CodeLink Microarray Performance for Gene Expression Profiling Applications. Nucleic Acids Research. 2002, Vol. 30, pages 1-12, see entire document.	1-67
A	FUGEN et al. Selection of Optimal DNA Oligos for Gene Expression Arrays. Bioinformatics. 2001, Vol. 17, pages 1067-1076.	1-67
Y	DUGGAN et al. Expression Profiling Using cDNA Microarrays. Nature Genetics Supplement. January 1999, Vol. 21, pages 10-14, see entire document.	4-9, 12-15, 19, 22

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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